Idowu Deborah Olanrewaju

1. Definition of communicable disease

Communicable disease is a disease that can be transmitted from one person to another, from animals to humans, or through the environment. It is caused by infectious agents such as bacteria, viruses, fungi, or parasites.

(b)

Causative agent of communicable disease are the pathogens which includes, virus, bacteria, fungi and parasite as well as a special class of infectious protein called prions.This is a specific organism that causes diseases.Examples virus, bacteria, fungi,protozoa etc.

(c)

Mode of transmission is a way a disease causing organism(pathogens) spread from one host to another. It describes how an infection moves from its source to a susceptible host.Examples are Direct Transmission, indirect transmission,vector borne transmission etc.

(d)

Methods of prevention and control refers to the strategies, actions, and measures used to stop a disease from occurring or spreading, and to reduce its impact if it has already occurred.It means the ways we prevent diseases and stop them from spreading.Examples vaccination, Good hygiene,vector control, health education awareness etc

(2)

Explain the terms endemic,epidemic and pandemic.

EPIDEMIC: is a sudden increase in the number of cases of a disease above what is normally expected in a specific population or geographic area.Example: Hepatitis B, Lassa fever, measles,cholera etc.

ENDEMIC: Is a regular occuring disease within an area or community.Example malaria, Guinea worm, schistosomiasis etc.

PANDEMIC: Is when a new disease or new strain of an existing disease spreads worldwide.Example COVID 19, HIV/Aids

(3)

Define and distinguish between incidence and prevalence.Explain their importance in epidemiology with examples.

INCIDENCE: Refers to the number of new cases of a disease that occurs in a specific population

during a defined period of time .it also measured the risk or probability of developing a disease.

Importance of incidence.

I. It focuses on new casesl only

II. It helps in measure the risk of getting disease.

III.it often express as a rate, where to send medicine, vaccine etc.

Example: if 50 new cases of malaria happen in village of 1000people in one year.

PREVALENCE:is an epidemiological term that refers to the total number of existing cases of a disease or health condition in a given population at a specific point in time or over a period of time, divided by the total population at risk.

Importance of prevalence

I. It helps to understand the burden of disease

II. Useful for planning health services and resources

III. Helps to track chronic disease like HIV and diabetes

Examples: if a town has 10,000 people and 500 currently have a diabetes.

(4)

Describes the measures used in controlling communicable disease at the community level.

I. Health Education and Community Awareness: Educating the public on disease prevention (handwashing, safe food handling, sanitation etc. Promoting healthy behaviors (use of mosquito nets, vaccination, personal hygiene.

II.Immunization: Providing routine vaccines (e.g., measles, polio, TB) Conducting mass vaccination campaigns during outbreaks.

III.Environmental Sanitation: Ensuring clean water supply and proper sewage disposal Safe waste management.

IV.Surveillance and Reporting: Detecting and monitoring communicable diseases

Immediate reporting of notifiable diseases (e.g., cholera, measles).

V.Case Management and Treatment: Case Management and TreatmentProviding early diagnosis and effective treatment Free or affordable access to essential drugs and healthcare services.

(5)

Write short note on the following: Epidemiological triangle, vehicle borne transmission, point prevalence and period prevalence

Epidemiological triangle:The epidemiological triangle is a model used in public health to explain how infectious (communicable) diseases occur and spread. It shows the interaction between three key components:Agent, host and environment.

Vehicle borne transmission:Vehicle-borne transmission is the spread of infection through contaminated food, water, or objects that carry infectious agents from one host to another.

Point prevalence: Point prevalence is the number of existing cases of a disease in a population at a specific point in time divided by the total population at that time.

Period prevalence:Period prevalence is the total number of people who had a disease at any point during a given time period (e.g., a month or year) divided by the total population during that period.